Aerosol Transmissible Disease
Cal/OSHA Advisory Meeting – Draft Minutes
Exposures to Infected Animals
May 19, 2006 Oakland CA

Chairs: Robert Nakamura, Deborah Gold

Participants
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Ivan Jackman, California Department of Fish and Game
Anne Katten, California Rural Legal Assistance Foundation
William Krycia, Cal/OSHA
Ernie Machado, Foster Farms
Jim Marnatti, Foster Farms
Debbie Murdock, Pacific Egg and Poultry Association
Bob Myers, Foster Farms
Mert Price, Santa Clara County Department of Agriculture
Cynthia Rice, California Rural Legal Assistance Foundation
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Len Welsh, Cal/OSHA
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Summary of Key Points

1. Most poultry industry employers participate in biosecurity programs through industry associations and the CDFA
2. It is appropriate to trigger increased worker protection when there is a quarantine or movement restriction placed on an establishment by CDFA or USDA, due to a disease that can be transmitted to people. Usually these restrictions are based on "dangerous contacts." Most participants agreed that respiratory protection should be provided for employees who were in close contact with flocks to which these restrictions apply, when the disease can be transmitted by aerosols.
3. Workers should be trained now on how to identify infected birds, and what to do. Employers should also plan in advance to implement increased protection, if necessary.

4. An N95 respirator is probably appropriate during a period of quarantine, but other respirators will need to be considered for culling and eradication operations.

Detailed Minutes

Below are detailed notes of the advisory meeting. These notes do not represent a transcript of the meeting, and are simply a summary of the notes taken by the people conducting the meeting. Although every effort has been made to accurately reflect the opinions expressed in the meeting, they should not be considered to be a verbatim record of the proceeding.

Introduction

Cal/OSHA's acting chief Len Welsh opened the meeting and thanked the participants for attending. He gave a brief history of the project, referring to Cal/OSHA's meetings in the 1980s to develop a tuberculosis standard. This effort was put on hold when federal OSHA announced its decision to address tuberculosis in the 1990s. A few years ago federal OSHA dropped that rule-making project and placed the use of respirators for protection against TB under the general industry respirator standard, which required Cal/OSHA to take a similar action. There was a lot of opposition from health-care employers to the federal action, particularly in regards to annual fit testing, and similar criticism was expressed in California. However, in California, employers and employees asked that Cal/OSHA consider developing a comprehensive standard to address diseases spread through the air, and to consider the fit test requirements in that context. Infectious disease concerns still include tuberculosis and other traditional diseases, but have expanded to include SARS, and now the possibility of an avian influenza epidemic. It was these concerns that led to the inclusion of operations that dealt with infected poultry and then to this meeting today.

L. Welsh described the rule-making process. He said that after these pre-rulemaking activities a proposal will be sent to the Occupational Safety and Health Standards Board who will send it to the Office of Administrative Law for publication. This information will also be posted on the Standards Board web site. The publication starts a 45 day public comment period during which written comments can be submitted. There will also be a hearing at the end of this period at which verbal comments will be taken. All comments will be responded to. If it's determined that changes need to be made there will be one or more additional notices for 15 day public comment periods. Once the proposal is finalized there is an additional step that is unique to the Cal/OSHA standard setting process, which is that it is then submitted for a vote to the Standards Board. The Standards Board consists of seven members appointed by the governor. If the standards Board votes to adopt the regulation it will then be sent to the Office of Administrative Law for a review and then publication in the California Code of Regulations.

L. Welsh introduced the Cal/OSHA staff, and asked the participants to identify themselves.

Subsection (i) and Avian Influenza

Deborah Gold began the discussion of the portions of the standard relating to exposure to infected animals. She explained that this regulation would apply only to animals infected with pathogens that can cause disease in people. She said one example of this is the current (Asian) strain of H5N1 influenza virus which, although not readily transmissible to people, has caused mortality greater than 50% in the reported cases. D. Gold said that there are two concerns about human exposures to infected animals. The first type of exposure occurs to poultry workers and others who may be exposed to infected animals during an incubation period, during which the animals may not appear to be sick. Also, some workers may be exposed to sick or dead animals, and the disease may not be known. The second is to workers exposed to animals or animal waste once infection has been detected in a flock. The second kind is similar to a hazardous-waste operation. However there are problems in applying that standard to eradication and disposal operations for infected animals, in that the high levels of protection that are required in initial response would be difficult to apply to these operations. There are also concerns about protecting the contingent workforce that would be brought on to supplement the employees from the California Department of Food and Agriculture (CDFA). In the experience with Exotic Newcastle Disease (END) personnel from the California Conservation Corps and laid-off poultry workers were hired to perform these operations. Fortunately, Newcastle does not normally cause serious disease in humans, because the pictures from those operations in some cases show improper use of personal protective equipment. She said that the purpose of proposed subsection (i) is to address these exposures. She then asked people if they had any general comments regarding subsection (i).

Carol Cardona said that she did not understand why this section would apply to avian influenza since there is no evidence of aerosol transmission from bird to human. She said that the experts agree that it is spread by droplets which contact the eyes or mucous membranes of the person. D. Gold asked her about the statement of the American Veterinary Medical Association and mentioned a recent study indicating that the receptor for the Asian H5N1 strain of concern are deep in the lung for humans. C. Cardona said that she was on the AVMA committee, and that they and the doctors at UC Davis agree that it is droplet transmission, not aerosol. D. Gold explained that this standard applies to both those aerosols which are considered to be transmitted by droplets and those which are considered airborne. She explained that infection control professionals distinguish between those diseases which are primarily spread by droplets greater than 5 microns, which are assumed not to penetrate deep into the lung and which are assumed to settle out of the air quickly, and smaller droplets or droplet nuclei, which remain suspended in the air longer and can be inhaled more readily into the lung. Industrial hygienists who study the behavior of aerosols do not recognize a sharp distinction between the sizes, and recognize that particles larger than 5 microns may be inhaled into the respiratory tract and into the lung, although not as effectively. After much discussion in these advisory meetings the term aerosol was chosen to represent both types of transmission through the air, with distinctions being made on the specific protective measures for the two categories of diseases. C. Cardona said that there is information that avian influenza may

be transmitted by contact with blood or by mucous membranes. There are avian influenza receptors in the eye for this particular strain. She said it is important that recommendations be science-based.

L. Welsh said that it is important that we not get blindsided by unknowns. We don't know how likely it is that there will be airborne transmission of this disease to humans. The bottom line is whether there is a hazard to workers. We have to be sensitive to the ways that different professions defined the same terms. D. Gold explained that in the development of the standard people felt was important to address diseases that are spread by droplets as well is droplet nuclei. It was also felt that we need to address infectious aerosols that are generated by certain work processes, such as laboratory created aerosols. For example Brucellosis is not typically spread person-to-person by aerosols. However laboratory personnel have become infected by brucella containing aerosols generated by laboratory operations. It is important to design the protection to fit the disease. The National Institute for Occupational Safety and Health (NIOSH) and federal OSHA have published guidance to protect workers from avian influenza. OSHA only gets involved if there is a hazard to workers. If this strain of H5N1 turns out not to cause human disease, then this standard would not apply.

Debbie Murdock said they have been following this issue on the federal level and she doesn't know if they've had enough input from the poultry industry. D. Gold said that in California we are able to work more closely with affected parties and to open lines of communication. That's one of the purposes of this meeting.

Biosecurity

Bob Nakamura said initially this standard was developed to address exposures in health care and related environments. When avian flu became an issue we first contacted the CDFA and have become aware of a lot of activity centered in Fresno, including a homeland security exercise, which some of today's participants also attended. One of the theories of how this disease is being transmitted in Asia is that it is following patterns of human activity, and that is being transmitted by humans. "Biosecurity" has become an important concept. He said that it is our understanding that if H5N1 arrives in California, there will be an alert issued, and some kind of quarantine practices or restrictions will be activated. He asked what would be the response to that alert from the industry people.

D. Murdock said the state poultry industry has developed good procedures for notification and control in that situation. In some facilities people would be required to register prior to entry. Some places have mechanical locking gates and other measures to exclude unauthorized persons. They have a hotline among the community of poultry growers. There are also arrangements regarding transportation. The layer operations are largely mechanized with few people involved. Those employees have been instructed to leave and shut the door if they see sick birds. Most ranches have an arrangement with a veterinarian and the UC Cooperative Extension. They are more than aware of the problem. They have been having meetings with Carol Cardona addressing issues such as disposal. They will also be working with the CDFA.

D. Murdock said that she believed the fryer industry has already mapped the roads because of the experience with less pathogenic diseases, and has also met with CDFA. Bob Cornell said that before an individual goes onto a farm with a vehicle, the vehicle has to go through a professional car wash. The person has to sign in and wear a suit with boots to prevent contamination of the flock. A person is limited to visiting two farms each day. Supervisors are trained about bird diseases. They keep the access very controlled and maintain a locked facility. They have had assistance from the CDFA. They believe that there is a much larger concern with the five million or so birds that are raised on small farms or backyards and go through live markets. The large producers know the risks from the experience with Newcastle, and they have made improvements after that experience.

B. Nakamura asked them what type of training is given to the supervisors. B. Cornell said that the supervisors are trained to recognize disease symptoms, and once the symptoms appear or an unusual number of dead birds are found, they are to call the veterinarians immediately, and start the lockdown procedures. There is one supervisor for each farm. The catcher crews are all Foster Farm employees.

B. Nakamura asked who kept track of the chicken markets. Mert Price said that the CDFA and the USDA sample them. There is a database of backyard poultry producers that was developed from the census. The Cooperative Extension has an outreach program to get them into a surveillance program. D. Murdock said that her association is working with the backyard industry to help them prepare for outbreaks. There are five million birds in the backyard poultry industry. It will be difficult to get them all prepared. B. Cornell said that Foster Farms prohibits employee contact with backyard poultry, and they will investigate any hint of contact and discharge the employee if that is proven.

B. Nakamura asked what the employers will do when the first alerts of a disease occurrence is given locally. C. Cardona said that she is working with occupational health physicians to develop and distribute a kit of materials that any poultry producer should have. There will be a meeting on May 30, 2006 where some information from the Delmarva [Delaware, Maryland and Virginia] area will be presented. How much occupational exposure there would be depends on the methods that are used to deal with the infected flocks.

Periods of Increased Risk

D. Gold said that the federal APHIS [Animal and Plant Health Inspection Service] plan calls for an alert via a hotline to be made once infected birds are detected. She said that Cal/OSHA is thinking that this alert should also trigger increased employee protection. She noted that fish and game people, and employees in agriculture may be exposed to infected birds during an incubation period, prior to the detection of infection. She asked if the kit covered that period. C. Cardona noted that the low path incubation period is 3-7 days, but the high path can be as short as 12 hours. D. Gold said that whatever the length of the incubation period, it means that before the infection is identified, the workers could

be exposed. Protection for employees needs to be provided during this incubation phase. She said that they aren't talking about level A suits, but there should be some reasonable protection. She noted that protective clothing should be selected with the consideration that there will probably be heat stress if the disease arrives in the fall as has been predicted by some.

She said that Cal/OSHA would like feedback from the participants about what should be done to protect the workers when a disease alert occurs. Also, how will the public health professionals track the infected workers for follow-up and treatment? Also, how should the public health and CDFA people who investigate the disease be protected?

Ivan Jackman said that the Federal guidance from several agencies is fairly consistent. The Park Service has guidance documents. In general, the strategy is to follow and test the migratory birds this year for avian flu. This is a low risk period, with an increasing risk once the virus is found in US birds. The high risk period comes when there is sustained human to human transmission, and the disease becomes a potential pandemic. Information is available at the site at www.dfg.ca.gov. Their jurisdiction covers only wild birds. They interface with cities, like the park departments, but it is more likely that the cities will first contact the counties. A communication plan has been developed that can be seen on their website. Alaska is especially active in surveillance now because of the concern that the migratory birds will bring the disease there.

D. Murdock said that the response to the arrival of the disease in the state will be statewide. C. Cardona added that quarantine is based on illness in the flock or "dangerous contacts" with the site. It may be initially voluntary before the CDFA imposes a quarantine. Once quarantines start, the north to south movement will be controlled. The valley is considered to be one quarantine unit. The San Diego area runs north to south. Truck washes would be implemented, and movements would be diverted. Diseases that are already covered are dealt with on a daily basis.

Ellen Wilson said that the CDFA is part of the national plan, and already has first response equipment, PPE and has had fit testing for respirators. D. Gold asked how the quarantine would be narrowed to more local areas, once the initial restrictions were placed on the state. E. Wilson said that there are many variables that control that decision, and it would be a fluid situation after the initial diagnosis. D. Gold asked how CDFA would establish the movement restrictions. D. Murdock said it is called "regionalization." C. Cardona said that with END, the industry developed regional plans, and this was an innovation developed in California. The idea that the disease is not as likely to be spread by proximity as by the transport of contagious materials was recognized by the industry. Understanding and controlling the movement of the people and equipment is the key to an effective control plan.

D. Gold asked once the alert happens and there is heightened biosecurity, what is going to be done to protect the workers who are still handling the poultry. This is not to say that the day to day PPE has to change now, but is the alert a good trigger point for increased PPE? D. Murdock said they should be doing this already; coveralls and showers are

already in place. D. Gold noted that Cal/OSHA rarely has a big effect on the good employers who have already adopted protective practices, and the proposed standard is intended to identify and adopt appropriate practices for the whole industry. She asked if the idea of using the alert to trigger worker protection changes seems appropriate. It seems that given the nature of the problem, that there should be a higher level of protective clothing and respiratory protection.

Cynthia Rice said that the industry generated points raised earlier for worker protection did not include a training component before the triggering event. Also, it would not be good to have the alert be the point where the first changes are made. There should be training as soon as possible for the workers, not just the supervisors. Access to PPE should be made when there is a higher risk of the disease occurring, and the PPE should be identified ahead of time. She said that many of the broiler operations are very isolated, and a highly trained supervisor might not visit more than once every two days. Most of the barn staff in Sonoma, Napa and the central valley, speak Spanish. If there were high morbidity rates in one or more barns, they would be the first to notice. They should be trained enough that they can report. There may be one or more lock-downs in a season. There could be higher levels of protection once the CDFA starts the eradication. Training for these aspects of the work is needed ahead of the actual event.

Ernie Machado asked if OSHA has identified the most effective PPE for this process. D. Gold said that OSHA produced the safety and health information bulletin (SHIB) that was included in the handouts today. The PPE depends on the situation and conditions. Choosing between PAPRs [powered air purifying respirators] and N95s [filtering facepiece respirators] requires considering the conditions of the exposure. For example very high humidity and oil mists may reduce the effectiveness of the N95 over time. Also, the N95 doesn't protect against disinfectants or ammonia. The federal government has talked about providing "push packs" with PPE, but these may not actually be ready or supplied to states in a timely manner.

E. Machado asked if it is then up to industry to identify the most effective PPE. D. Gold said that an employer is generally required to do a hazard assessment. Cal/OSHA would like to provide information to help with that. Active culling and euthanasia is very different from the normal operations of the facility. The concern here is to determine the precautions needed during the incubation period. The CDFA may use the workers from the effected facilities to do the culling as with END, so it would be helpful to provide some training earlier. She asked if a biosecurity alert is the appropriate time for that.

Rupa Das said that the industry has mentioned a thorough training program for the supervisors, but what training do the workers get? Is it done in Spanish? D. Murdock said that there is annual training of workers, including training in Spanish. There are also lots of Chinese workers, and that training has been done. This is the case for most of the large facilities. E. Machado said that all their people get training. Biosecurity is their life; it is the biggest challenge for their industry. There are movement restrictions and 3 levels of control. What PPE is recommended? When END entered California, there was enforcement of restricted movement, and investigations of backyard poultry to provide

constant tracking of the disease progress. If avian hits southern California, should it mean moving to use additional PPE? Newcastle was not a human disease.

D. Gold said that human conjunctivitis was associated with END. The pictures of the END eradication available on the web show many of the workers were not wearing the PPE appropriately. While that wasn't much of an issue with END, if the [Asian H5N1] avian influenza strain is transmitted to humans, it appears that the person may get very sick, consequences are very serious. We need to assure that workers wear the respirators correctly. The respirator itself can also become a hazard if it is not disposed of properly because it becomes contaminated. This is why you have to give the workers the right information ahead of time.

C. Cardona said that industry is prepared to add this information in. They have identified the people who will be involved. The industry needs reasonable standards for PPE, for example, something that will not create a heat illness issue. If there is an early trigger, the log books provide a way to identify the other sites and facilities that have been in contact with the infected location. The employer would then use exclusion and lockdowns as protective measures for the flocks and workers. Once there is a lockdown, even the CDFA is not supposed to go to the site without a specific reason. These are the early protection methods that are ready. There are other avian diseases that are not human problems that have to be guarded against already. The trigger needs to be applied to everybody, not just the big producers. A lot of employers already provide seasonal flu shots. There are certain reasonable things like personal hygiene that would also be very important for controlling disease transmission.

D. Gold said that the analysis of trigger points to control disease in animals should be similar to the ones to protect people. To summarize, now there are people who have been trained, there is separation of the barns, and there are zones of control. The issues are where the exclusion and decontamination occurs, adding in training for avian flu, adding in other plans to be prepared for activities with CDFA/USDA if eradication is needed. Also, we should address training people ahead of time. Much of the planning for protecting the flocks is in place. Is it effective to protect people? Has the planning been done to protect workers if the disease arrives? For example, if a wet decon is required, that will cause more heat stress, because the clothing would need to be resistant to water and chemicals. There are other issues like personal modesty so this requires some training. Also, people need to be trained in the correct way to wear PPE. Eye protection needs planning. When government workers arrive to conduct culling operations, they should be able to rely on a site plan.

Anne Katten said that more should be written in the proposed standard about changing rooms and the areas for decontamination. Breaks should also be specified in the draft.

Chuck Isaacson asked if the standard could reference the industrial wage orders about break rooms. D. Gold said it would have to be in a Cal/OSHA regulation for Cal/OSHA to enforce it. Bill Krycia said that break rooms are already addressed in Section 3362.

D. Gold said that there may be a problem with applying it to this situation. She said that training is already part of the IIPP general requirements. She said that they were thinking that as the level of biosecurity increases, the level of PPE should increase. For instance, coveralls need to be washed on site or if they use their own work clothes, they need to be washed and left in lockers on site.

E. Machado said that they already require the use of coveralls and boots and there is dedicated on site laundering. C. Cardona noted that hand washing is required before decon with alcohol wipes or other agents because the caked on waste matter can't be easily disinfected. D. Gold said that the remaining issue is the use of respirators. In the decon process, respirators are generally the last piece of equipment to be removed and decontaminated since it may have infectious materials on it as well. C. Cardona said that their website has information for training workers on the proper removal of PPE.

A. Katten said that the poultry employers are not all heavily resourced large businesses, and this needs to be considered. There needs to be specific training information. D. Gold suggested that a note could be added to the text that the plans should be in accordance with 3203. The idea here is to keep it general, the PPE needs to be used in other kinds of business settings, for example, trapping deer mice and protecting against the Hanta virus. C. Rice said a general trigger should be identified like a threat to an area and this would trigger training. B. Krycia noted that the Hanta virus is a known hazard, and that situation is different from this high path avian problem. The ATD standard may apply to both. I. Jackman said that with 3203 there has to be an initial hazard, but avian influenza is really a new hazard. D. Gold said that the problem with relying solely on Section 3203 is that it does not give the employer specific guidance to follow for a specific problem. This proposal attempts to be more specific for this hazard, and the problem is deciding on what is enough guidance. It has been suggested to use the USGS alert. If the trigger is some alert, you have to choose the one that will give employers in a given area adequate warning.

C. Cardona noted that so far we have ignored facilities like veterinarians, veterinary clinics and wildlife rehabilitation centers. The virus was detected in Austria from a swan and sick cats. There needs to be an educational effort for all those performing this animal care and their staff. Should this extend to the golf course that has a lot of Canadian geese? D. Gold responded that the standard and its application are based on the concept of "occupational exposure" which means a risk of exposure due to their occupation that is elevated above the risk to the general public. If avian influenza infects the geese in Lake Merritt we are probably all exposed already. For this reason, this standard wouldn't apply to occupations with heavy public contact like bus drivers or teachers. This approach is necessary because the proposal's necessity and justification is part of the regulatory review for a standard. Bill Krycia has been participating in the avian working group which is developing educational materials. So, right now we are not thinking of including golf course grounds keepers in the standard.

There was a lunch break. During that period, C. Cardona provided a copy of a document "Poultry Industry Alert levels," that she and some colleagues developed for employers.

Respiratory protection

D. Gold explained how assigned protection factors are used in relation to chemical exposures. She said that the protection factor approach works, if you know the amount of the chemical outside the respirator, and you know what the safe exposure limit should be. But the protection factor approach does not work well in general for infectious diseases. For example, TB is considered to be transmissible by one droplet nuclei, and droplets from an infectious source may contain thousands of virus particles. Under the OSHA standards, the SCBA [self-contained breathing apparatus] is required for unknown levels of exposure, but it is not what we are considering for exposures to infected animals, because it couldn't be implemented.

She said that the powered air purifying respirator (PAPR) is worth considering because it provides eye protection, the type that blows the air from the top down keeps the face plate from fogging up, and it tends to be cooler for the user. They can also be fitted with chemical cartridges combined with the air filtering cartridge. However, it does not provide protection against carbon dioxide (CO2), and does not provide oxygen. They cost about 800 dollars each. Johns Hopkins uses them for their staff. The N95 is considered to be the lowest acceptable level of protection. It provides general filtering of particles but there can be an issue if the environment it's used in is very humid since very high humidity may degrade the facepiece seal, and oil mists may reduce effectiveness of the filter. There is a need to be careful when the user readjusts the respirator since movement on the face can affect the seal of the respirator. There are also indications that there can be a buildup of CO2 within the respirator from the user's exhaled breath. The N95 also provides a less effective filter than a cartridge with a HEPA or P-100 filter.

Elastomeric facepiece respirator use can be physically demanding for the user, and because the cartridges are on the side of the face, there can be interference with some work tasks. They cost about $20-$60 dollars. One of the handouts shows that the International Association of Fire Fighters recommends using P-100 filters for situations involving avian flu exposure as a minimum level of protection [Informational Bulletin for Emergency Responders, IAFF, available at: http://www.iaff.org/safe/content/Avian%20Flu/Pan%20Flu%20Final.htm]. But it should be noted that their concern is about the free floating virus particle, and there is evidence that an avian influenza virus that is free floating in the air [not protected by respiratory secretions or fecal matter] would be inactivated in minutes.

E. Machado asked if the P100 then should be considered for the precautionary period. D. Gold said that most guidance specifies N95s as a precautionary level, but the egg washing station or other operations with very high concentrations, oil mists, or humidity might have to go to a P100 which is less affected by mists, and is a more effective filter. C. Cardona said that the precautionary period should start when a zoonotic organism is detected and a quarantine or movement restrictions are initiated. The quarantine period should be the precautionary period of time. There is increased risk at that time, although

infection has not yet been detected. The precautions should apply while the infection is being confirmed by the CDFA, for organisms that are pathogenic to people.

D. Gold asked what level of protection would be appropriate for the precautionary period. C. Cardona noted that during the quarantine, the infection is not immediately confirmed. D. Gold asked if during the precautionary quarantine-type period, the N95 would be necessary and sufficient to protect workers. E. Machado asked if the protections in place for the poultry wouldn't also be protecting the workers. C. Cardona noted that this applies to the facilities that are "at risk" within the quarantine area. The state generally quarantines facilities near the outbreak that have some sort of route of contact or potential exposure as being at risk D. Murdock said that there are movement restrictions immediately. Traffic needs permits. CDFA has moved towards regionalization of facilities and control based on "dangerous contacts", and then to trigger higher alerts if it progresses.

D. Gold said it seems that there would be initially a wide net that is narrowed down. C. Cardona said that this is because the testing for verifying the disease takes time. D. Gold said that if respirators are going to be used by workers in close contact with a suspected flock, then people need to be prepared beforehand. When contact limitations are in place, how many people would need to use respirators? How much of a burden would this place on employers? How many people need to go into the barns? D. Murdock said that for the typical layer operation, one person each day would go into the henhouse. But if there is an outbreak, it is unclear what the procedure would be.

B. Krycia said there would be other airborne contaminants to consider and asked if there has been monitoring done to measure background levels of aerosols in poultry houses, and where that information could be found. B. Cornell replied that air monitoring data is available. D. Gold asked that people send available data or other information to the Division.

D. Gold said that there had been agreement that morning that increased worker protection should be tied to increased biosecurity measures. She asked whether the trigger for using respiratory protection should coincide with the movement restrictions and the mandatory logging of traffic. C. Cardona said that industry conducts active surveillance of the flocks. D. Gold noted that the "alert" status means that the facility has not been ruled out as having an infectious outbreak, should employees use respiratory protection at this point? C. Cardona said that the surveillance for END was done at a lower level of effort than for the current avian threat; the current surveillance is at the highest level. Quarantines would be established on a regional basis. E. Wilson said that the focus is on animal to human transmission, and testing will determine if it is a human disease. C. Cardona said that the goal is to avoid any transmission to humans. There are three cases to consider as a trigger for PPE, when the birds are not infected, when they are infected, and when the infection is suspected but not proven.

D. Gold said that it seems that participants are supporting the idea that human protection should be tied to the biosecurity triggers. B. Cornell said that the terminology needs to be

clarified. If the outbreak happens, it will more likely start in downtown LA than in a large facility. B. Krycia said that the backyard birds have become a public health issue. Cal/OSHA regulates the employer/employee relationship. The Division will devise a regulation and then inform the employers and employees who are affected. D. Gold added that the regulation would cover the smaller poultry producers also, if there are employees. B. Krycia noted that Foster Farms is ahead of the curve among producers, and their input is needed to bring the rest of the producers along to deal with the problem. D. Murdock said that the "dangerous contact" concept could be the trigger for respiratory protection.

D. Gold then asked how long respirators would need to be used. The maximum incubation period is about 8 days according to some research. This would mean implement protections with the trigger and then stand down as cleared. Choose a small number of personnel that would gear up and do the basic work to run the facility at a minimal activity level. What percentage would that be? People should check the possibility of implementing increased protection, and consider where are the points of human exposure, and how many people would be involved. One issue that is driving this process for poultry operations, health care, and even government is that people won't come to work that may involve being exposed if they feel that the employer has not done something to make them safe. For example, studies have shown that even nurses have indicated that when the personal risk becomes too great, they will not show up at work.

D. Murdock said that there are two symposia scheduled for the next week where these issues could be brought to light. E. Machado and C. Cardona noted that the testing turnaround is at least 12 hours to identify the strain. Then there is the process of changing the normal process in response to the situation. C. Cardona asked E. Machado how many days the facility could operate with only half the workforce, and was told 2 days. She said, so there would be 2 days without driving them out of business. During that time, there would be no routine maintenance or veterinary services conducted. D. Gold asked how the restrictions on dangerous contacts concept works regarding facilities in the immediate area. D. Murdock said it would be different for the layers.

C. Isaacson asked if the high hazard procedure concept in the proposed standard would apply to animal handling. D. Gold said there would be different concerns about specific animal related activities, so this subsection needs to have more detail in the text. Chuck said that the CDC guidelines should drive the selection of the respirator for carcass disposal, and currently that is the N95. They will submit information regarding respirator selection.

D. Gold asked for suggestions or documentation about the time frames for the precautionary period and how the quarantine is initiated and directed to its clearance. C. Cardona said that there are no producers who wouldn't want to implement respiratory and eye protection for the workers as long as the decision is based on the science of the disease transmission. It does seem reasonable to start looking at a precautionary time frame based on the start of quarantine and identification of the dangerous contacts. Training is a necessary way of preparing for the arrival of avian flu in the state.

D. Gold said that it would be best to work with the system that is already in place to cover the periods of uncertainty for exposure to the workers. The goal is to determine the set points. C. Cardona said she would provide the CDFA set points.

D. Gold noted that the respirators cannot be implemented under "voluntary use" provisions, when the purpose is to protect against infectious disease. She said that employees really need to be prepared and trained ahead of time. She noted that additionally workers who are likely to participate in eradication efforts will also need a full respiratory protection program, including a contingent workforce supervised by the CDFA.

A. Katten said that the eradication procedures will be hazardous because the procedures will be new for everyone, and the environments will have unknown hazards. Workers should use PAPRs. B. Krycia said that Cal/OSHA Consultation unit will conduct outreach. During an eradication operation, inspectors would be out to assist the safety effort and make sure that things are done properly. There has been a precedent for this with the past experience with Bovine foot and mouth outbreaks several years ago. Cal/OSHA can work with the industry on avian problems in the same manner.
B. Cornell said that some of this may be moot because the eradication process will be taken over by the USDA. D. Murdock noted that USDA staff at other meetings have taken direction from C. Cardona.

D. Gold said that the national response plan would have Federal OSHA involvement just as the state response would include Cal/OSHA. We all need to have a good working relationship to get through this. It is important to be able to protect any contingent workforce, and develop strategies that will minimize damage to the facilities. C. Cardona noted that there has been a credibility issue at times because some of the people involved in planning lack real expertise. D. Gold added that the thing to focus on is that we all want the people involved in dealing with the infected animals to be safe, and the best approach would be to develop a consistent approach.

E. Wilson asked what regulation currently covers the use of respirators. D. Gold responded that it is covered by Section 5144 [http://www.dir.ca.gov/Title8/5144.html] and noted that a guidance document, "Respiratory Protection in the Workplace," is available in the publications sections of the DOSH website.
[http://www.dir.ca.gov/dosh/dosh_publications/respiratory.pdf]

D. Gold reminded the group to send monitoring information, and information about the number of people who would be affected by the precautionary period where the infection is close but unconfirmed at the site, and how many would need respirators. A. Katten said there should also be more on a system to track and notify exposed workers in the proposal. Heidi Fowers said that she would get information about the animal control operations for evaluating their coverage by the proposal.

Meeting adjourned.